

SAE INTERNATIONAL

SAE ITS Standards Development

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*Global Ground Vehicle Standards
SAE International*

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INTELLIGENT TRANSPORTATION SYSTEMS / CONNECTED VEHICLE TECHNOLOGY

SAE ITS Standards Development

- SAE under 5 year contract with FHWA for ITS standards development
- Work performed by SAE contractors working in concert with the SAE DSRC Technical Standards Committee
- Key Deliverables
 - SAE J3067, Candidate Improvements to Dedicated Short Range Communications (DSRC) Message Set Dictionary [SAE J2735] Using Systems Engineering Methods, published in August, 2014
 - Specifies dialogs, messages, and the data frames and data elements that make up the messages specifically for use by applications intended to utilize the 5.9 GHz Dedicated Short Range Communications for Wireless Access in Vehicular Environments, communications systems.
 - Next Step – develop J2945.x tracks
 - Future Work – Next Revision of SAE J2735 (NextGen), Dedicated Short Range Communications (DSRC) Message Set Dictionary™

SAE J2945.x – Top Candidates

2945.1 V2V Safety Awareness	2945.2 Adaptive Signal Methods	2945.3 Weather & Road Reporting	2945.4 ATIS Transmission
<ul style="list-style-type: none"> • Forward Collision Warning • Intersection Movement Assist/Left Turn Assist/ Non-signalized Crossing Traffic Warning • Blind Spot Warning/Lane Change Warning • Situational Awareness • Control Loss Warning • Emergency Vehicle Alert • Pre-crash Actions 	<ul style="list-style-type: none"> • Red Light Violation Warning/Dilemma Zone Protection/Don't Block the Box/Left Turn Assistance • Emergency Vehicle Priority/Transit Vehicle Priority • Intelligent Traffic Signal System • Railroad Crossing Warning 	<ul style="list-style-type: none"> • Road Weather Information for Maintenance and Fleet Management • Vehicle Data for Traffic Operations 	<ul style="list-style-type: none"> • Curve Speed Warning • Road Weather Information for Freight Carriers • Road Weather Information & Routing Support for Emergency Responders • Road Weather Advisories and Warnings for Motorists/Vehicle Data Translator/ Weather Response Traffic Information • Reduced Speed Zone Warning

SAE J2945.x – Additional Track Candidates

2945.5 Mayday Systems	2945.6 Platooning Systems	2945.7 Transit Systems	2945.8 Freight/CVO Systems
<ul style="list-style-type: none">• AACN Relay• Vehicle Emergency Response	<ul style="list-style-type: none">• Cooperative Adaptive Cruise Control• Eco-cooperative Adaptive Cruise Control	<ul style="list-style-type: none">• Dynamic Ridesharing• Dynamic Transit Ops• Integrated Multi-Modal Electronic Payment• Intermittent Bus Lanes• Route ID for the Visually Impaired• Smart Park & Ride System• Transit Connection Protection• Transit Stop Request	<ul style="list-style-type: none">• Border Management Systems• Container Security• Container/Chassis Operating Data• Smart Roadside Initiative• Freight Drayage Optimization• Freight -Specific Dynamic Travel Planning

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